

August 2006

FACT SHEET

DRAFT

Authorization to Discharge under the
National Pollutant Discharge Elimination System
for the
Managaha Island Wastewater Treatment Plant

NPDES Permit No. MP0020371

<u>Applicant and Mailing Address:</u>	Tasi Tours and Transportation, Inc. P.O. Box 501023 Saipan, MP 96950
<u>Applicant Contact(s):</u>	Takashi Murakami, General Manager (670) 235-9373 Stanley Good, Project Technical Staff (670) 256-6831
<u>Permitted Facility Address:</u>	Managaha Island Saipan, Northern Mariana Islands, MP 96950
<u>Facility Owner Contact:</u>	John Del Rosario, Secretary CNMI Dept. of Public Lands (670) 234-3751

I. Introduction and Description of Facility

On May 2, 2006, Tasi Tours and Transportation, Inc. ("Tasi Tours") submitted an application for a National Pollutant Discharge Elimination System (NPDES) Permit for the proposed discharge from a Wastewater Treatment Plant (WWTP) servicing Managaha Island, Saipan. The inhabited islet is owned by the Northern Mariana Islands and managed by the Commonwealth Northern Mariana Islands (CNMI) Department of Public Lands.

The small Managaha recreational island has a concession that has been awarded to Tasi Tours to service a variety of water sports (eg. scuba diving, snorkeling, parasailing, banana boating and fishing), as well as beaches, picnic spots, a food area, public restrooms and gift shops.

The wastewater treatment facility will serve a daily tourist population from 100 to 1,000, receiving only domestic sewage with a design flow of 0.005 million gallons per day (MGD). Plant construction is anticipated to be completed at the end of 2006, at which point Tasi Tours would assume full responsibility for the operation and maintenance of the plant.

Based on the permit application, the proposed WWTP will provide secondary treatment, capable of achieving up to 95% removal efficiencies for biochemical oxygen demand and total suspended solids (BOD and TSS, respectively). Treatment consists of influent flow equalization-denitrification, aerated activated sludge with flocculation, settling and disinfection by UV light or chlorination. Sludge is

thickened and stored for disposal at the Marpi Solid Waste Landfill, or for hauling off-site to the nearby Commonwealth Utilities Corporation's Sadog Tase WWTP (NPDES Permit No. MP0020010). Approximately every three (3) months when the sludge volume reaches a specified level, the sludge holding tank would be pumped and solids taken by boat to the Sadog Tase WWTP. Final effluent will be discharged approximately 150 feet offshore west of Managaha by the Tanapag Harbor, from an ocean outfall designated as Outfall No. 001 to Class A marine waters of Tanapag Harbor of the Philippine Sea. Any sampling and monitoring under the proposed permit shall be performed at Outfall No. 001.

The Endangered Species Act (ESA) requires federal agencies to consult with the U.S. Fish and Wildlife Service (USFWS) if their actions could beneficially or adversely affect any threatened and endangered species. EPA has determined that due to the insignificant volume of discharge, effluent released in compliance with this permit will have no effect on any threatened or endangered species that may be present in the area so no requirements specific to the protection of endangered species are proposed in the permit. A copy of the permit and fact sheet is being sent to the USFWS for review during the public comment period.

III. Commonwealth of the Northern Mariana Islands Water Quality Standards

To protect the designated uses of surface waters of the U.S., the *Commonwealth of the Northern Mariana Islands (CNMI)* has adopted water quality criteria in January 1997 and amended in September 2004, for waters of the Commonwealth. Under the jurisdiction of the CNMI, Division of Environmental Quality (DEQ), Saipan has two classifications (AA and A) for marine waters. Class A waters of Tanapag Harbor of the Philippine Sea are protected for their recreational use and aesthetic enjoyment; other uses are allowed as long as they are compatible with the protection and propagation of fish, shellfish, and wildlife, and recreation in and on these waters.

IV. Basis of Proposed Permit Requirements

The proposed discharge limitations are based on:

- A. Secondary Treatment Regulations contained in 40 CFR Part 133, Sections 133.101 through 133.105, promulgated September 20, 1984, and most recently amended on January 27, 1989. EPA used these regulations and its best professional judgment (BPJ) to develop limits for this facility.
- B. CNMI Water Quality Standards, adopted January 1997; amended September 2004

V. Designated Uses for Receiving Water

The designated uses of the receiving waters (coastal waters of the Tanapag Harbor of the Philippine Sea) as defined by the CNMI water quality standards are: recreational use, aesthetic enjoyment, as well as propagation of fish, shellfish, wildlife, and limited body contact.

VI. Determination of Effluent Limitations, Monitoring, and Reporting Requirements

A. Flow Rates

Under the proposed permit, there is no flow limit but the monthly and daily maximum flows must be monitored and reported. The monitoring frequency is once/month.

B. Five-Day Biochemical Oxygen Demand (BOD₅)

Under the proposed permit, the discharge shall not exceed a weekly average of 45 mg/l and a monthly average of 30 mg/l BOD₅. In addition, the arithmetic means of values, by weight, for effluent samples collected in a period of 30 consecutive calendar days shall not exceed 15 percent of the arithmetic mean of values, by weight, for influent samples collected at approximately the same times during the same period. These limits are required under 40 CFR Section 133.102(a).

Under 40 CFR Section 122.45(f), mass limits are required for BOD₅. Based upon the 0.005 MGD flow and using a conversion factor of 8.345, the mass limits for BOD₅ are based on the following calculations:

Monthly average

$$\frac{0.005 \text{ MG}}{\text{day}} \times \frac{30 \text{ mg}}{\text{L}} \times \frac{8.345 \text{ lb/MG}}{1 \text{ mg/L}} = 1.3 \text{ pounds/day}$$

Weekly average

$$\frac{0.005 \text{ MG}}{\text{day}} \times \frac{45 \text{ mg}}{\text{L}} \times \frac{8.345 \text{ lb/MG}}{1 \text{ mg/L}} = 1.9 \text{ pounds/day}$$

The monitoring frequency is once/month.

C. Total Suspended Solids (TSS)

Under the proposed permit, the discharge shall not exceed a weekly average of 45 mg/l and a monthly average of 30 mg/l TSS. Similar to BOD₅, the arithmetic means of values of TSS, by weight, for effluent samples collected in a period of 30 consecutive calendar days shall not exceed 15 percent of the arithmetic mean of values, by weight, for influent samples collected at approximately the same times during the same period. These limitations are consistent with 40 CFR Parts 133.101(f), 133.102(b) and 133.103(c). Mass limit requirements in accordance with 40 CFR 122.45(f) have also been proposed and are based upon the same calculation shown above for BOD₅. The weekly average is 1.9 pound per day and the monthly average is 1.3 pound per day. The monitoring frequency is once per month. Sampling and monitoring shall be performed prior to chlorination.

D. Determination of Effluent Limitation for Enterococci

In the proposed permit, the monthly geometric mean of enterococci shall not exceed 35/100 ml based on samples taken over a period of 30 days and no single sample shall exceed 276/100 ml as a single sample maximum, consistent with the CNMI specific water quality criteria for Class A marine waters. The monitoring frequency is once/month.

E. Total Residual Chlorine (TRC)

The facility proposes to use UV light or chlorination for disinfection. If chlorination is used, the proposed permit requires a monthly TRC limit of 7.5 µg/l and no single sample shall exceed 13 µg/l as a simple sample maximum, The monitoring frequency is once/month.

F. pH

The proposed permit requires that effluent pH not deviate more than 0.5 units from a value of 8.1, consistent with the CNMI WQS. The monitoring frequency is once/month.

VII. Reporting

The proposed permit requires discharge data obtained during the previous three months to be summarized on monthly discharge monitoring report (DMR) forms and reported quarterly. If there is no discharge for the month, report "C" in the No Discharge box on the DMR form for that month. These reports are due January 28, April 28, July 28, and October 28 of each year. Duplicate signed copies of these, and all other reports required herein, shall be submitted to the EPA Regional Administrator and the CNMI Division of Environmental Quality.

U. S. Environmental Protection Agency, Region 9
Pacific Islands Office, Mailcode: CED-6
75 Hawthorne Street
San Francisco, CA 94105

Division of Environmental Quality
Commonwealth of the Northern Mariana Islands
P.O. Box 501304
Saipan, MP 96950

VIII. General Standards

The proposed permit sets general standards that are narrative water quality standards contained in the CNMI Water Quality Standards. These general standards are set forth in Section B. General Discharge Specifications of the permit.

IX. Permit Re-opener

At this time, based on the permit application and type of discharge, there is no reasonable potential to cause or contribute to any excursion above water quality standards, hence no additional effluent water quality-based limits are being proposed. Should any monitoring or other information indicate that the discharge may cause, have the reasonable potential to cause, or contributes to excursions above water quality standards, the permit may be reopened for the imposition of water quality-based limits and/or whole effluent toxicity limits. The proposed permit may be modified, in accordance with the requirements set forth at 40 CFR 122 and 124, to implement any new EPA-approved Territory water quality standard.

X. Threatened and Endangered Species and Critical Habitat

A. Background:

Section 7 of the Endangered Species Act (ESA) of 1973 requires Federal agencies such as EPA to ensure, in consultation with the U.S. Fish and Wildlife Service (FWS), that any actions authorized, funded or carried out by the Agency are not likely to jeopardize the continued existence of any Federally-listed endangered or threatened species or adversely modify or destroy critical habitat of such species. Since the issuance of NPDES permits by EPA is a Federal action, consideration of a permitted discharge and its effect on any listed species is appropriate.

The proposed NPDES permit authorizes the discharge of municipal wastewater into the waters of Tanapag Harbor of the Philippine Sea, a water of the United States. The proposed permit contains provisions for monitoring conventional and nonconventional pollutants in compliance with the CNMI Water Quality standards, to ensure an appropriate level of quality of water discharged by the facility. A re-opener clause has been included should new information become available to indicate that the requirements of the permit need to be changed.

From the U.S. Fish and Wildlife Service's Threatened and Endangered Species System database, there are currently fourteen (14) federally-listed threatened (T) or endangered (E) species in the Northern Mariana Islands, as follows:

Status *Species listed in this state and that occur in this state*

- | | |
|---|---|
| T | Bat, Mariana fruit (=Mariana flying fox) entire (<i>Pteropus mariannus mariannus</i>) |
| E | Megapode, Micronesian (<i>Megapodius laperouse</i>) |
| T | Sea turtle, green except where endangered (<i>Chelonia mydas</i>) |
| E | Sea turtle, hawksbill (<i>Eretmochelys imbricata</i>) |
| E | Sea turtle, leatherback (<i>Dermochelys coriacea</i>) |
| T | Sea turtle, loggerhead (<i>Caretta caretta</i>) |
| E | Warbler, nightingale reed (old world warbler) (<i>Acrocephalus luscini</i>) |
| E | White-eye, Rota bridled (<i>Zosterops rotensis</i>) |

Status *Listed species occurring in this state that are not listed in this state*

- | | |
|---|--|
| E | Crow, Mariana (=aga) (<i>Corvus kubaryi</i>) |
| E | Moorhen, Mariana common (<i>Gallinula chloropus guami</i>) |
| E | Swiftlet, Mariana gray (<i>Aerodramus vanikorensis bartschi</i>) |

Status *Species listed in this state and that occur in this state*

- | | |
|---|---|
| E | Iagu, Hayun (=Guam), Tronkon guafi (Rota)) (<i>Serianthes nelsonii</i>) |
| E | <i>Nesogenes rotensis</i> (No common name) |
| E | <i>Osmoxylon mariannense</i> (No common name) |

B. EPA's Finding:

This permit authorizes the discharge of treated wastewater in conformance with the federal secondary treatment regulations and the CNMI Water Quality Standards. These standards are

applied in the permit both as numeric and narrative limits. Therefore, since the standards themselves are designed to protect fish, shellfish and wildlife, including threatened and endangered species, any discharge in compliance with these standards should not adversely impact any threatened and endangered species.

EPA has determined that due to the low quantity of the discharge, effluent released in compliance with this permit will have "No Effect" on any Federally-listed threatened or endangered species or its critical habitat that may be present in the area. No requirements specific to the protection of endangered species are proposed in the permit.

XII. Information and Copying

The Administrative Record, which contains the draft NPDES permit, the fact sheet, comments received, and other relevant documents, is available for review and may be obtained by calling or writing to the above address.

All comments or objections received within thirty (30) days from the date of the Public Notice, will be retained and considered in the formulation of the final determination regarding the permit issuance.

XIII. Administrative Information -- Public Notice, Public Comments, and Requests for Public Hearings

In accordance with 40 CFR 124.10, public notice shall be given by the U.S. EPA Director that a draft NPDES permit has been prepared by mailing a copy of the notice to the permit applicant and other Federal and State agencies, and through publication of a notice in a daily or weekly newspaper within the area affected by the facility. A copy of this public notice is available on EPA website at <http://www.epa.gov/region09/water/npdes/pubnotices.html> . The public notice shall allow at least 30 days for public comment on the draft permit.

In accordance with 40 CFR 124.11 and 12, during the public comment period, any interested person may submit written comments on the draft permit, and may request a public hearing if no hearing has already been scheduled. A request for public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing. In accordance with 40 CFR 124.13, all persons must raise all reasonably ascertainable issues and submit all reasonably available arguments supporting their position within thirty (30) days from the date of the Public Notice. Comments may be submitted either in person or mailed to:

U.S. Environmental Protection Agency, Region IX
CWA Standards and Permits Office (WTR-5)
Attn: Linh Tran
75 Hawthorne Street
San Francisco, CA 94105
Telephone: (415) 972-3511

Division of Environmental Quality
Commonwealth of the Northern Mariana Islands
P.O. Box 501304
Saipan, MP 96950
Telephone: (670) 664-8500

Interested persons may obtain further information, including copies of the draft permit, fact sheet/statement of basis, and the permit application, by contacting Linh Tran (WTR-5) at the U.S. EPA address, above. Copies of the administrative record (other than those which U.S. EPA maintains as confidential) are available for public inspection between 8:00 a.m. and 4:30 p.m., Monday through Friday (excluding federal holidays).

In accordance with 40 CFR 124.12, the U.S. EPA Director shall hold a public hearing when she finds, on the basis of requests, a significant degree of public interest in the draft permit. The Director may also hold a public hearing when, for instance, such a hearing might clarify one or more issues involved in the permit decision. Public notice of such hearing shall be given as specified in 40 CFR 124.10.